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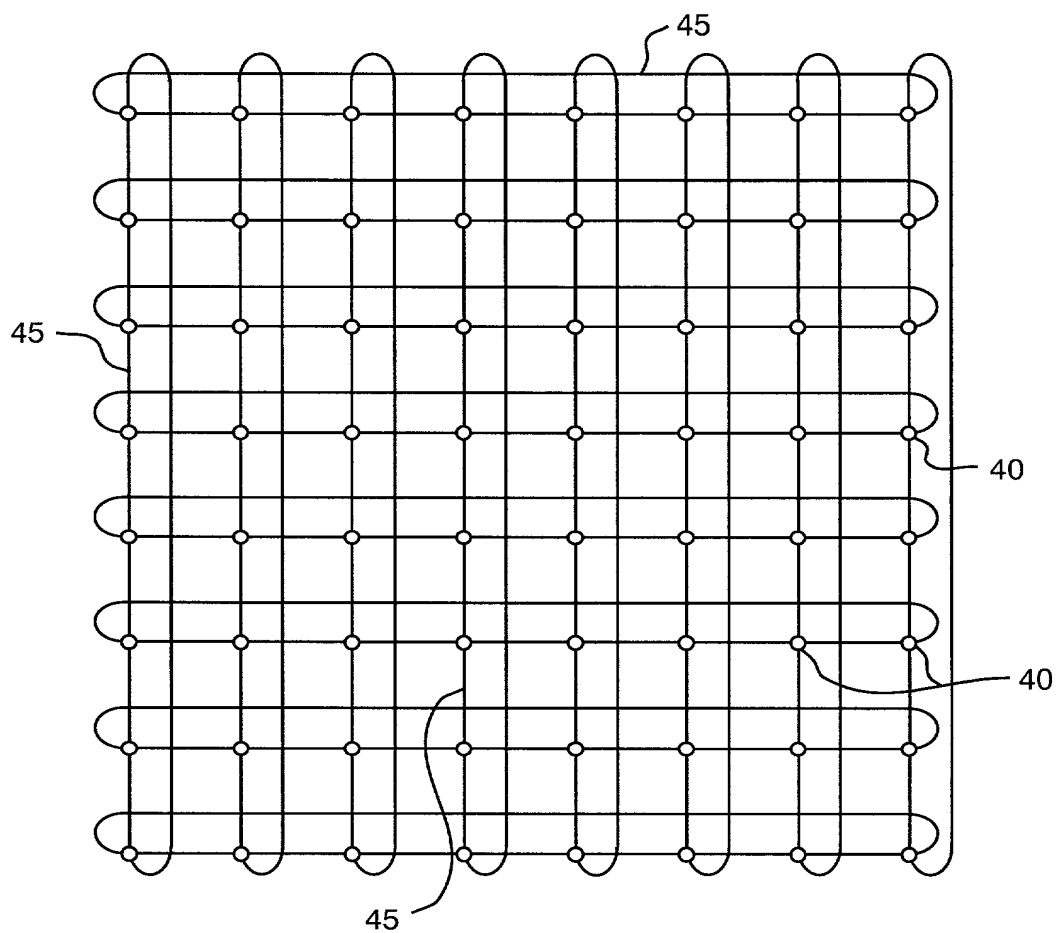


FIG. 1

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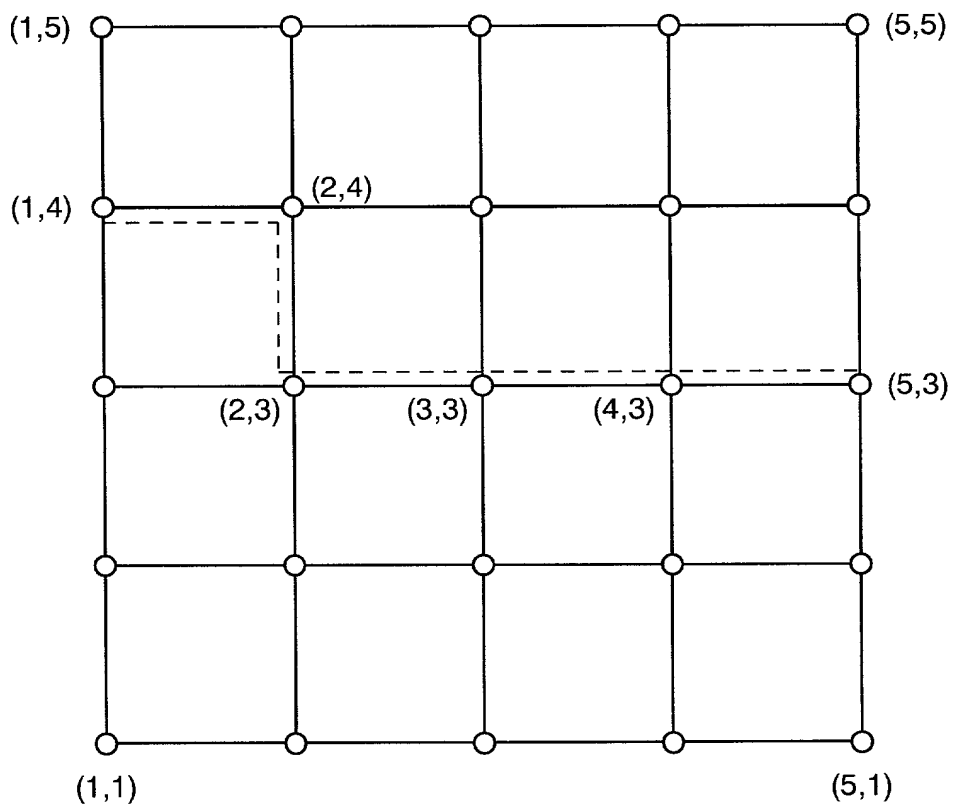


FIG. 2

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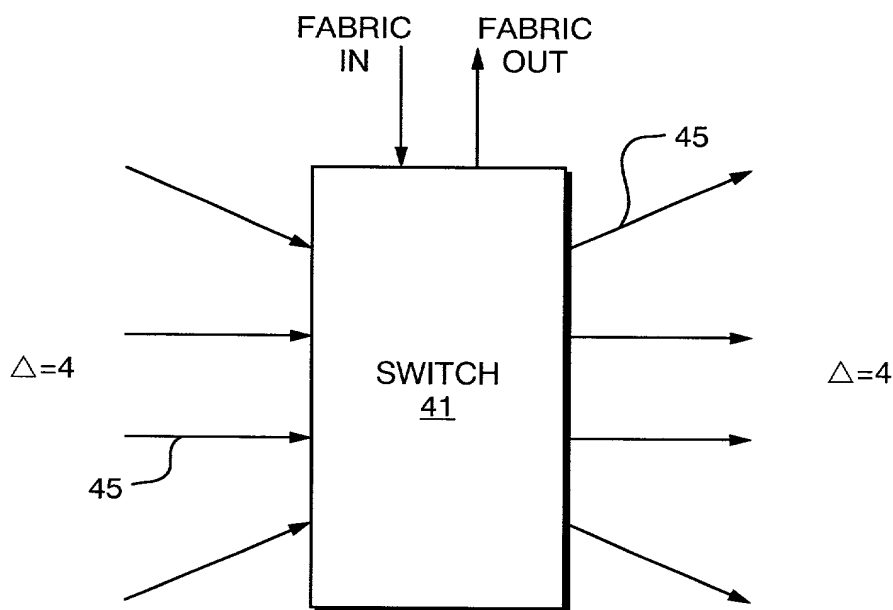


FIG. 3

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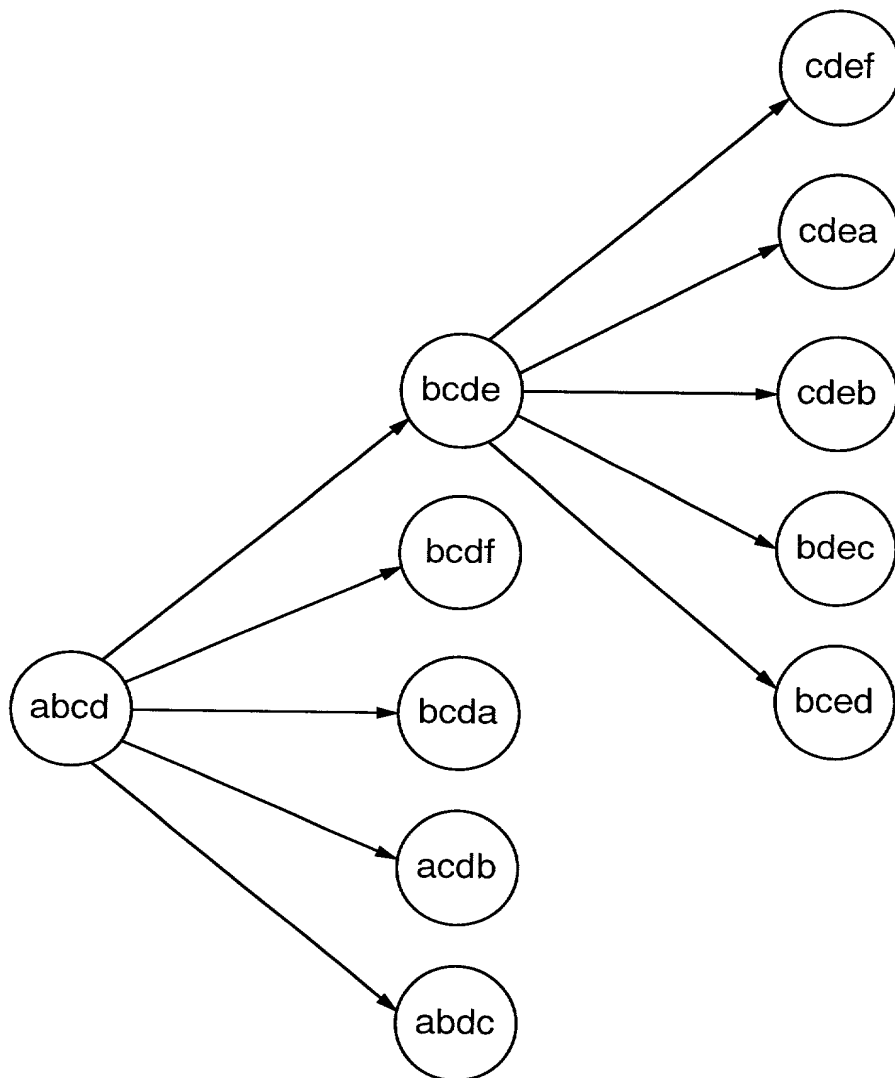


FIG. 4A

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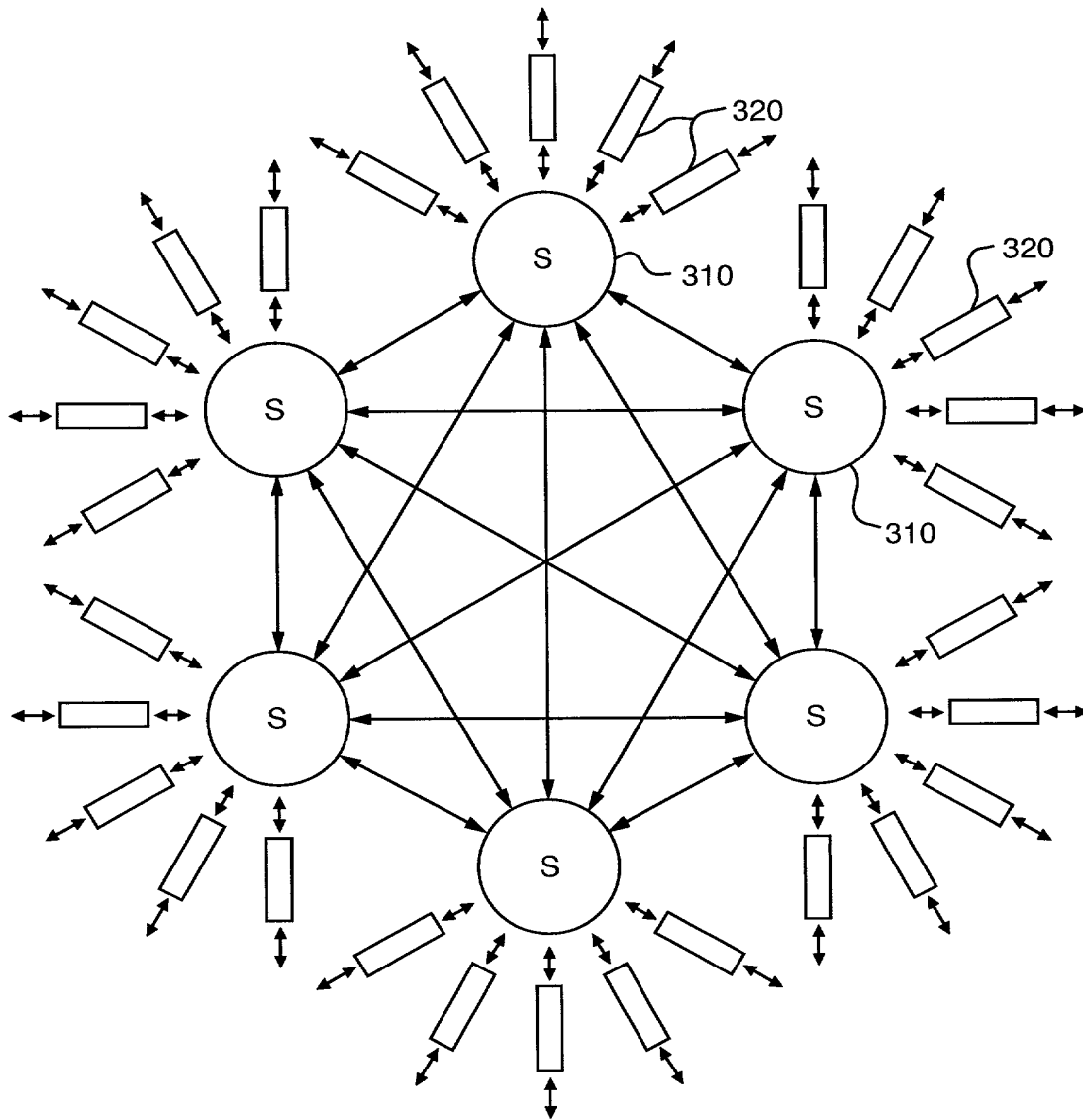


FIG. 4B

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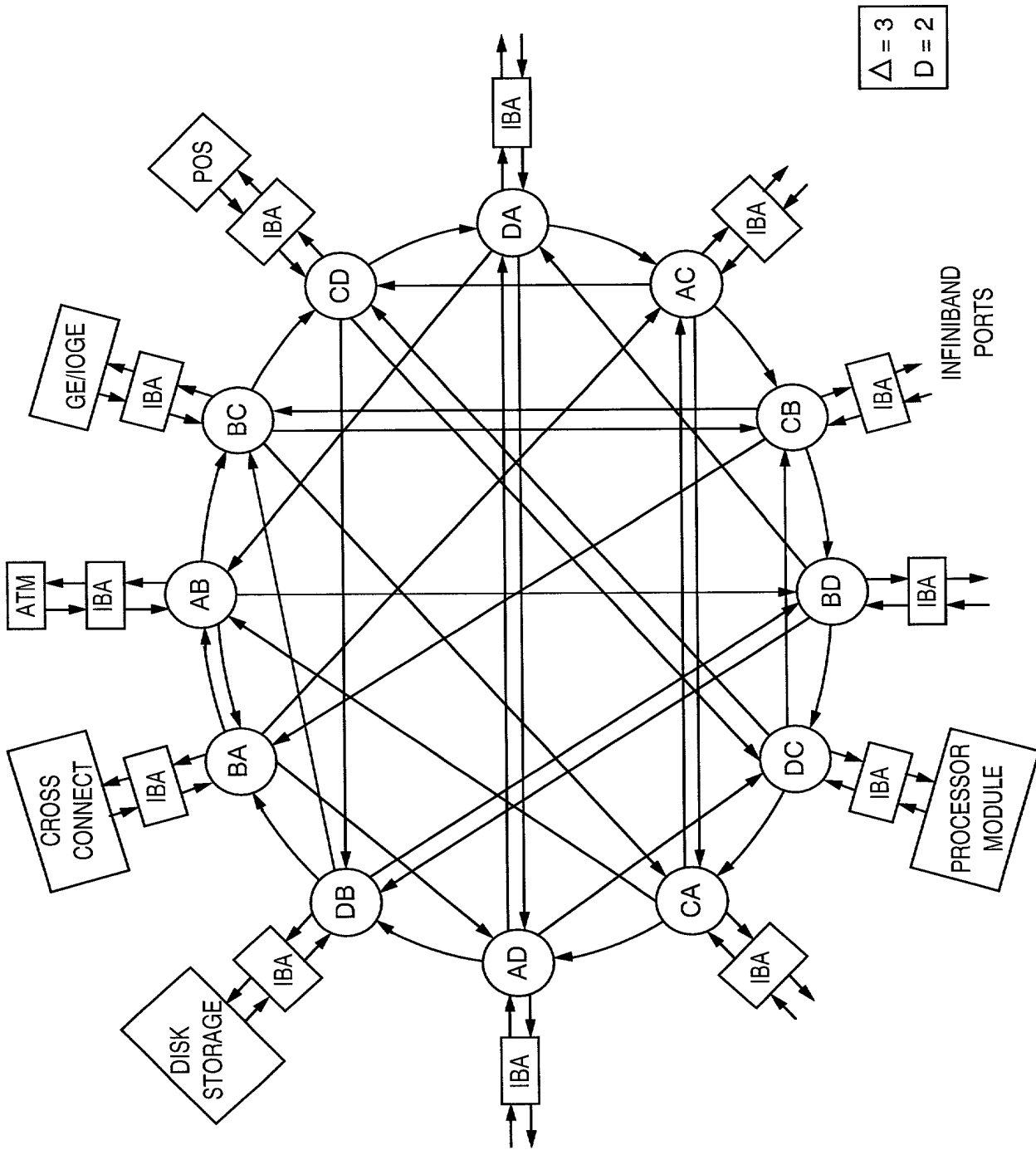


FIG. 5A

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AB AB → BC AB → BD AB → BA	AC AC → CB AC → CD AC → CA	AD AD → DB AD → DC AD → DA
BA BA → AC BA → AD BA → AB	BC BC → CD BC → CA BC → CB	BD BD → DA BD → DC BD → DB
CA CA → AB CA → AD CA → AC	CB CB → BD CB → BA CB → BC	CD CD → DA CD → DB CD → DC
DA DA → AB DA → AC DA → AD	DB DB → BA DB → BC DB → BD	DC DC → CA DC → CB DC → CD

FIG. 5B

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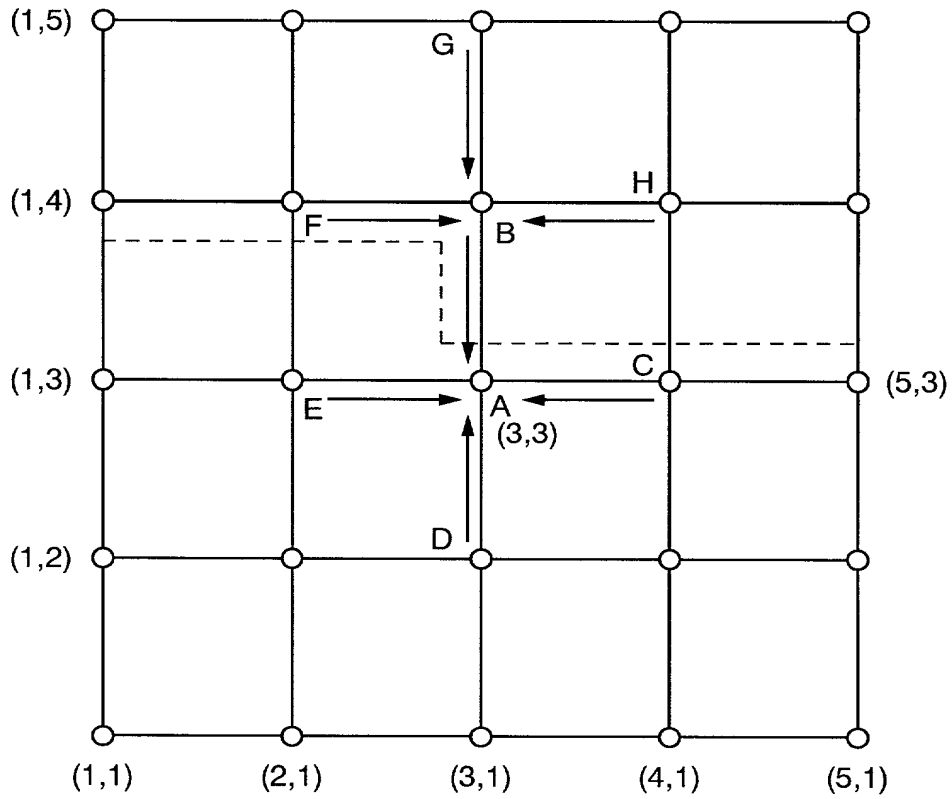


FIG. 6

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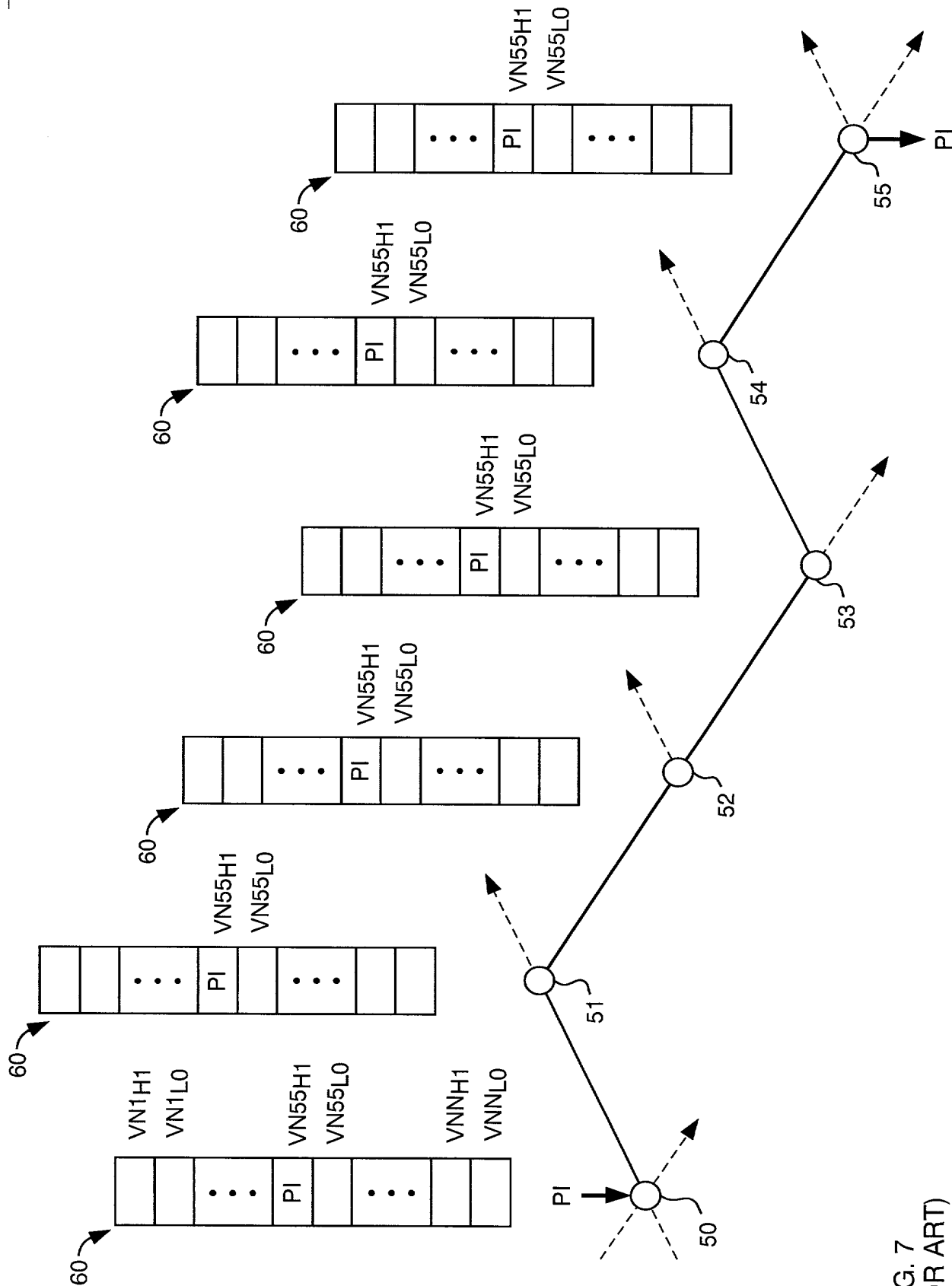


FIG. 7
(PRIOR ART)

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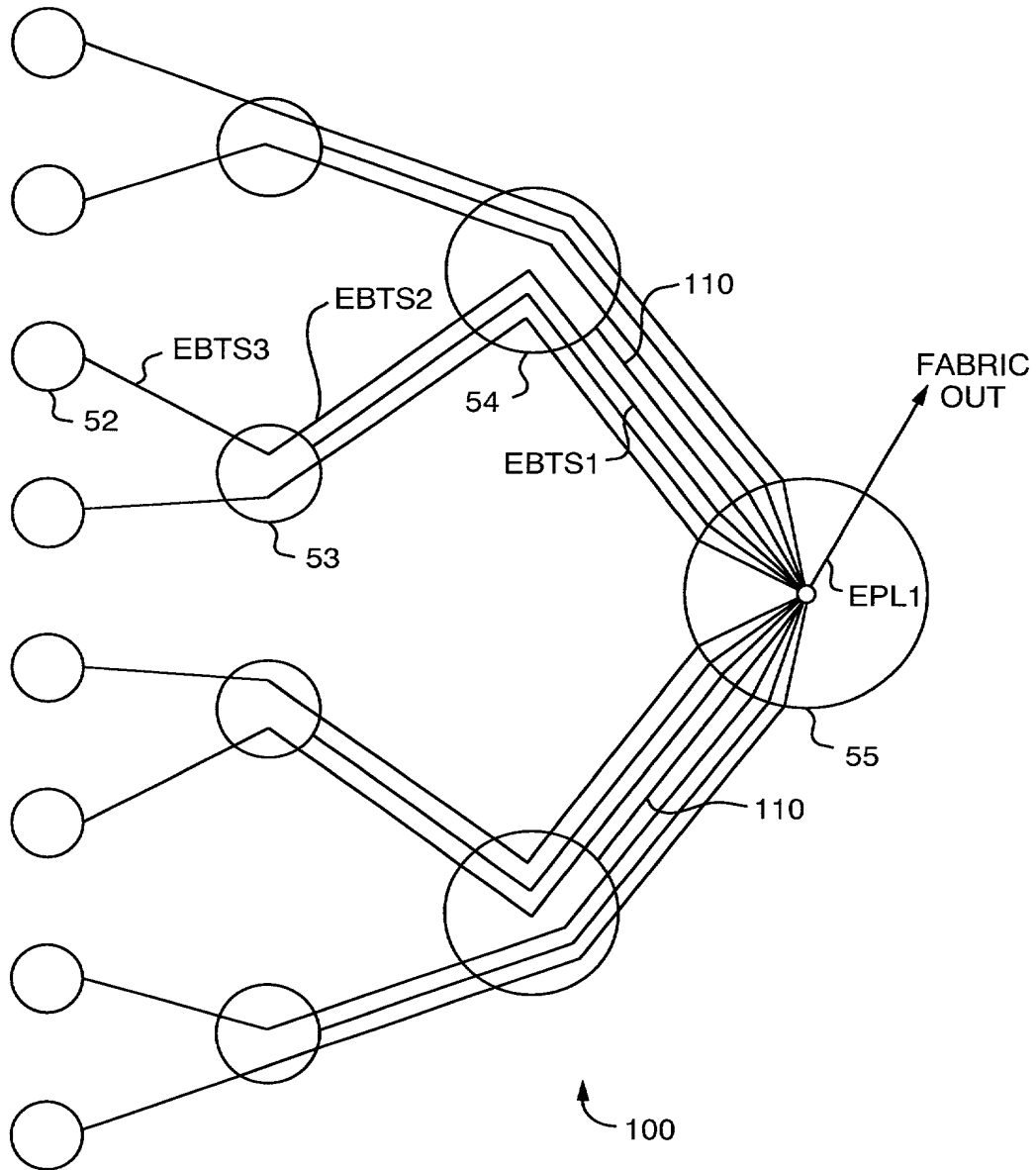


FIG. 8A

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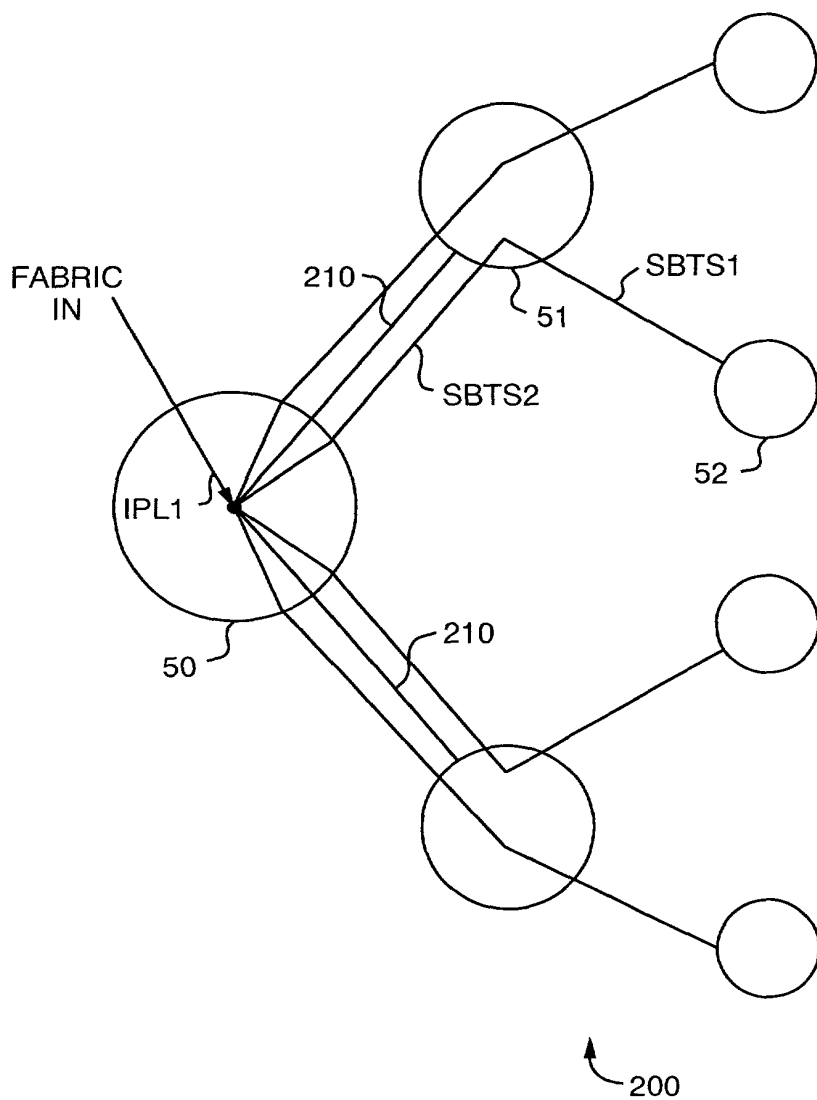


FIG. 8B

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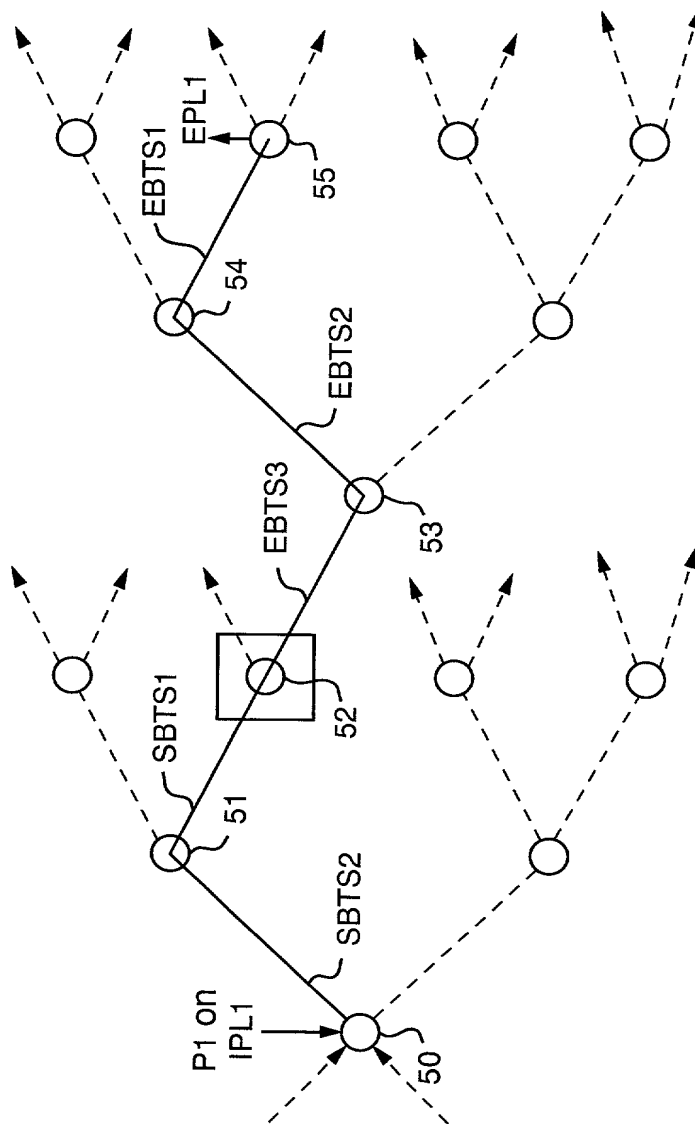


FIG. 9

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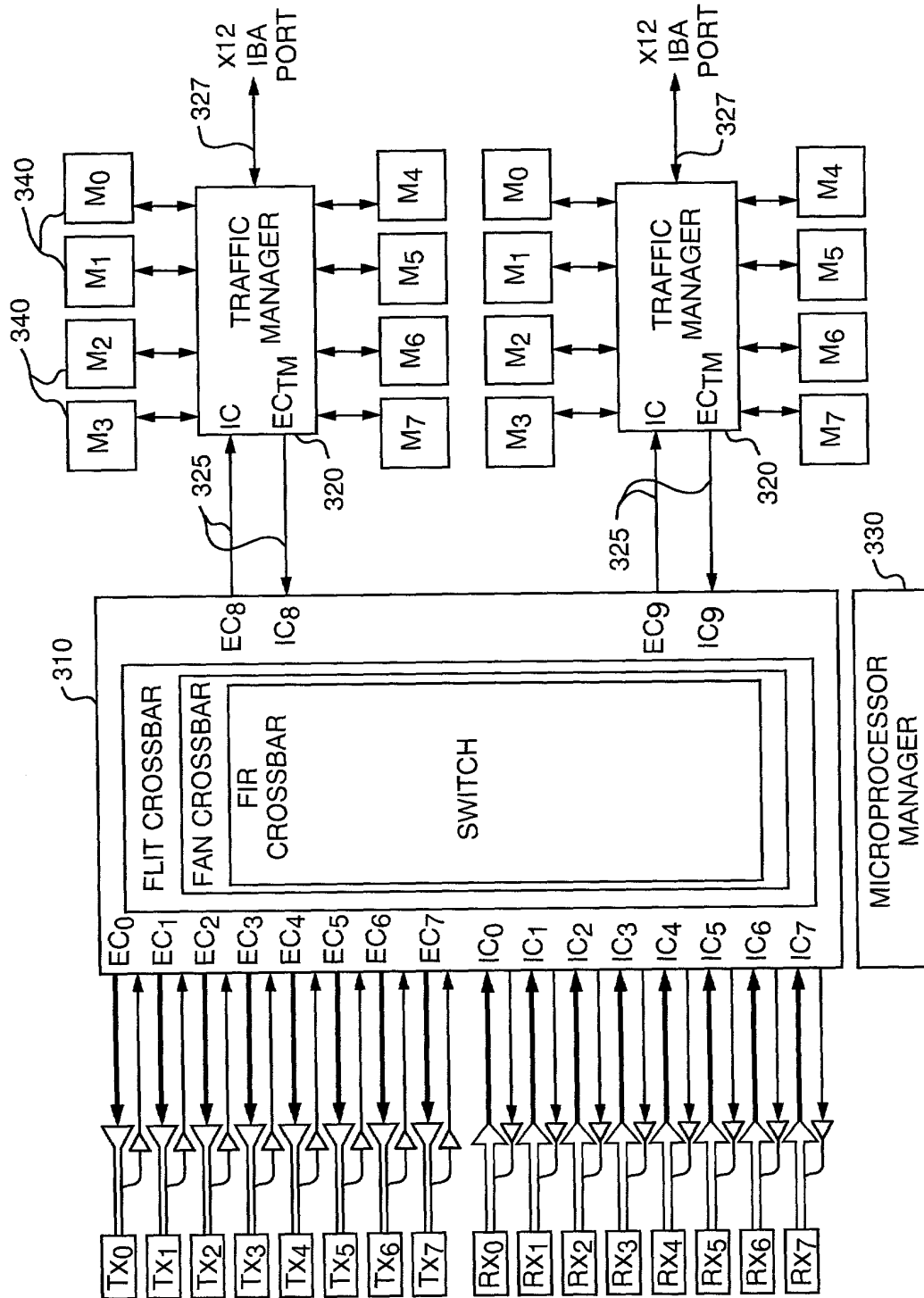


FIG. 10

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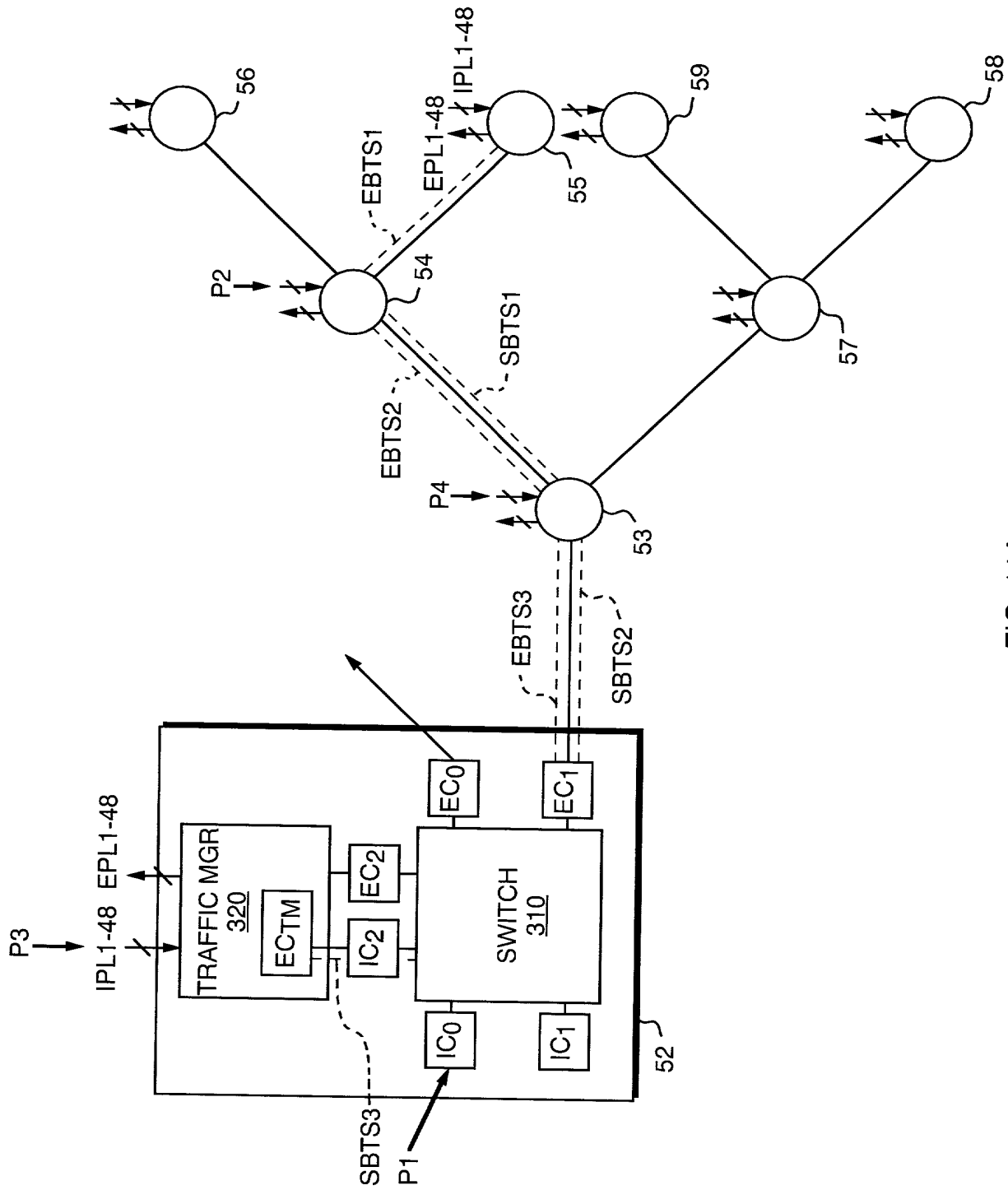


FIG. 11A

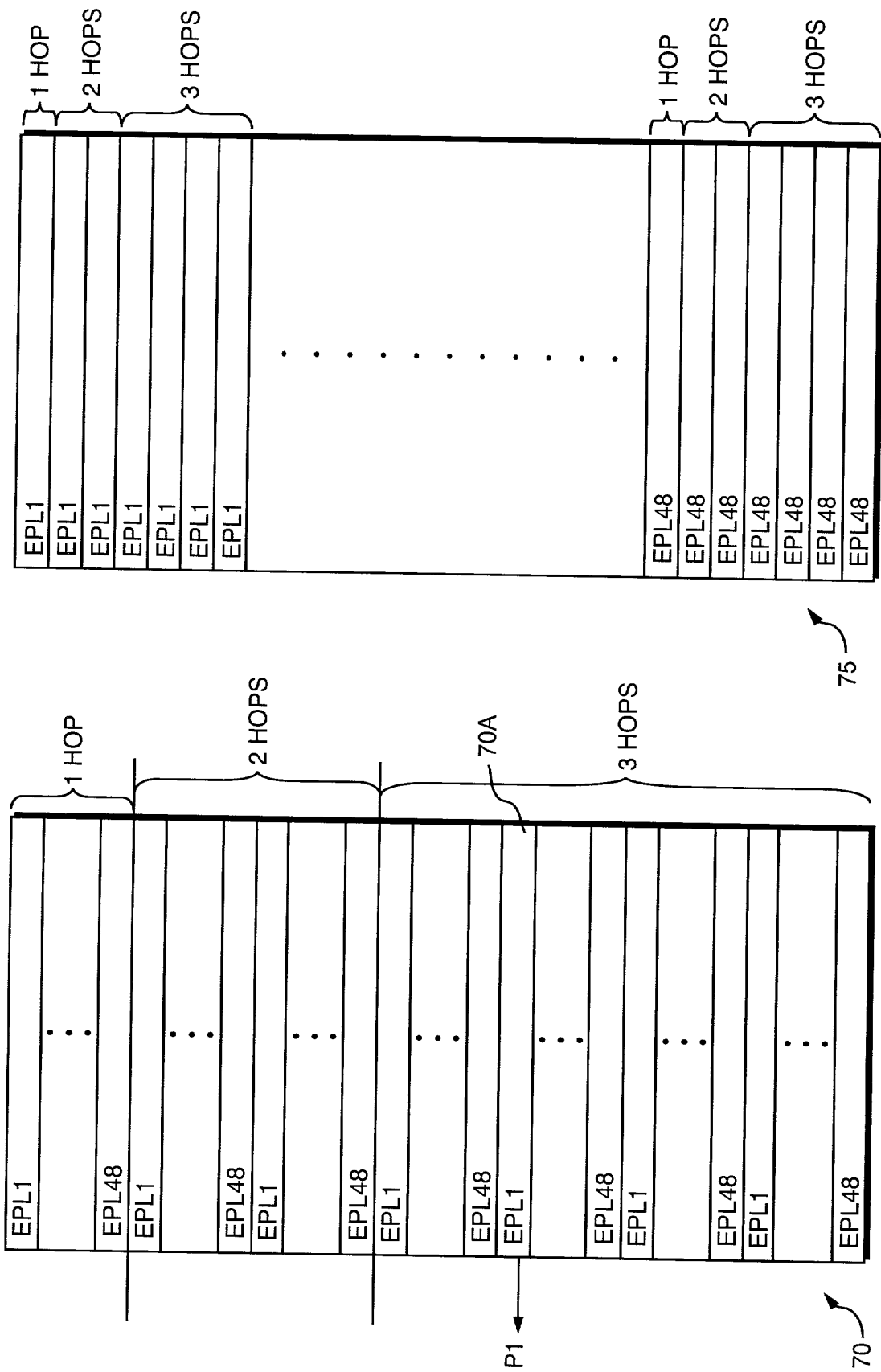


FIG. 11B

FIG. 11C

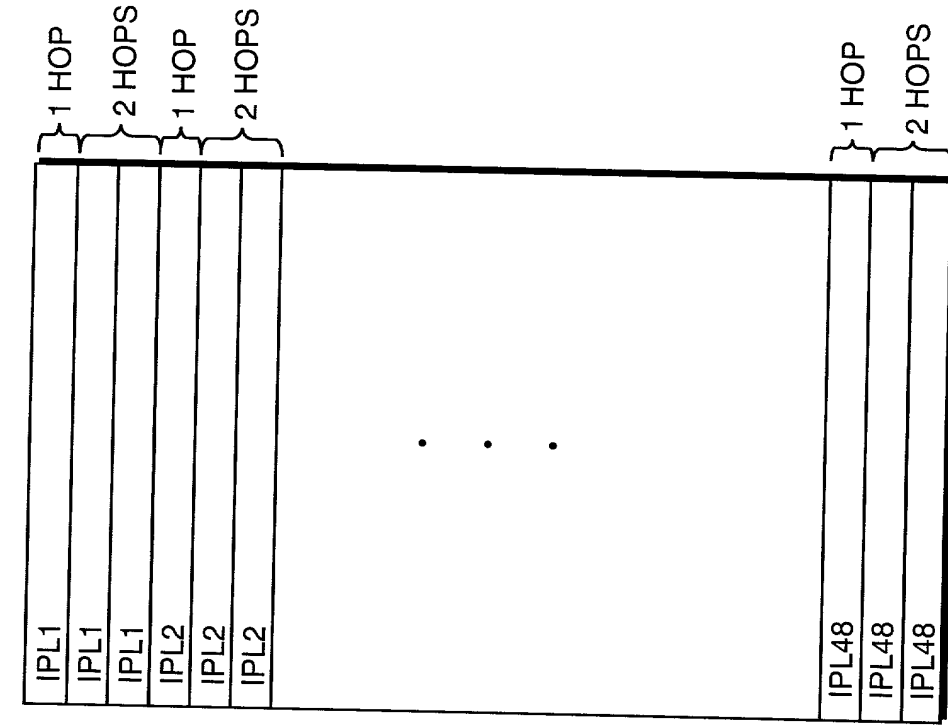


FIG. 11E

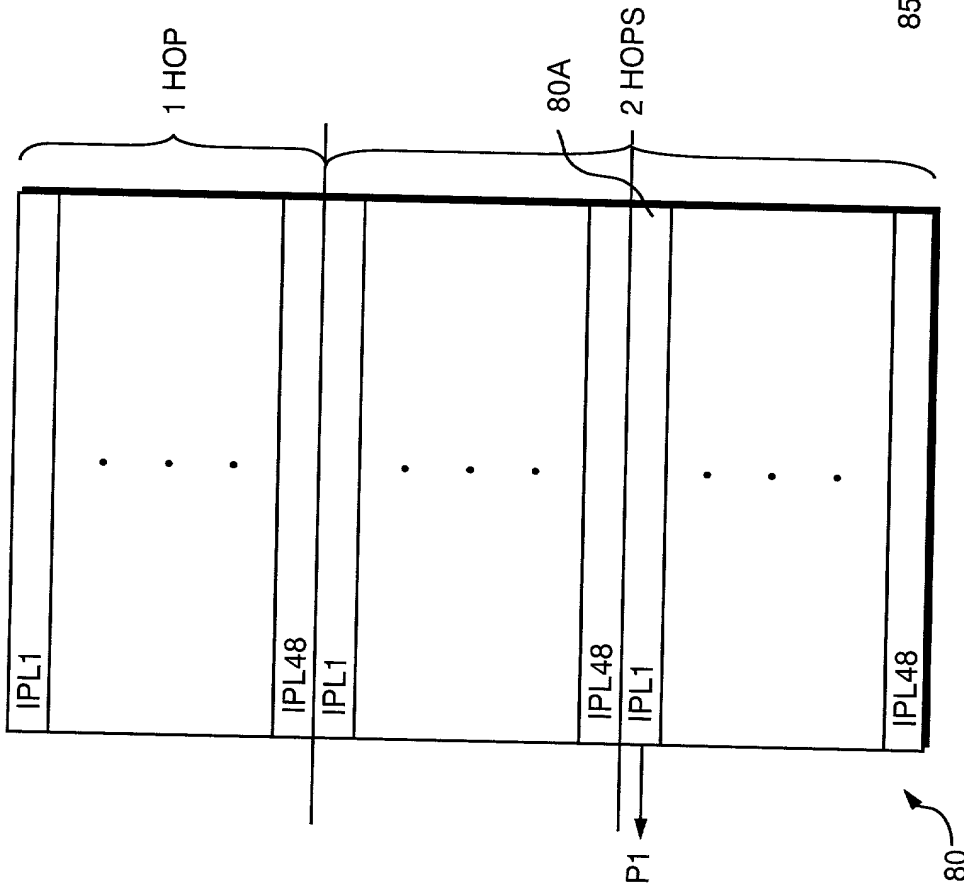


FIG. 11D

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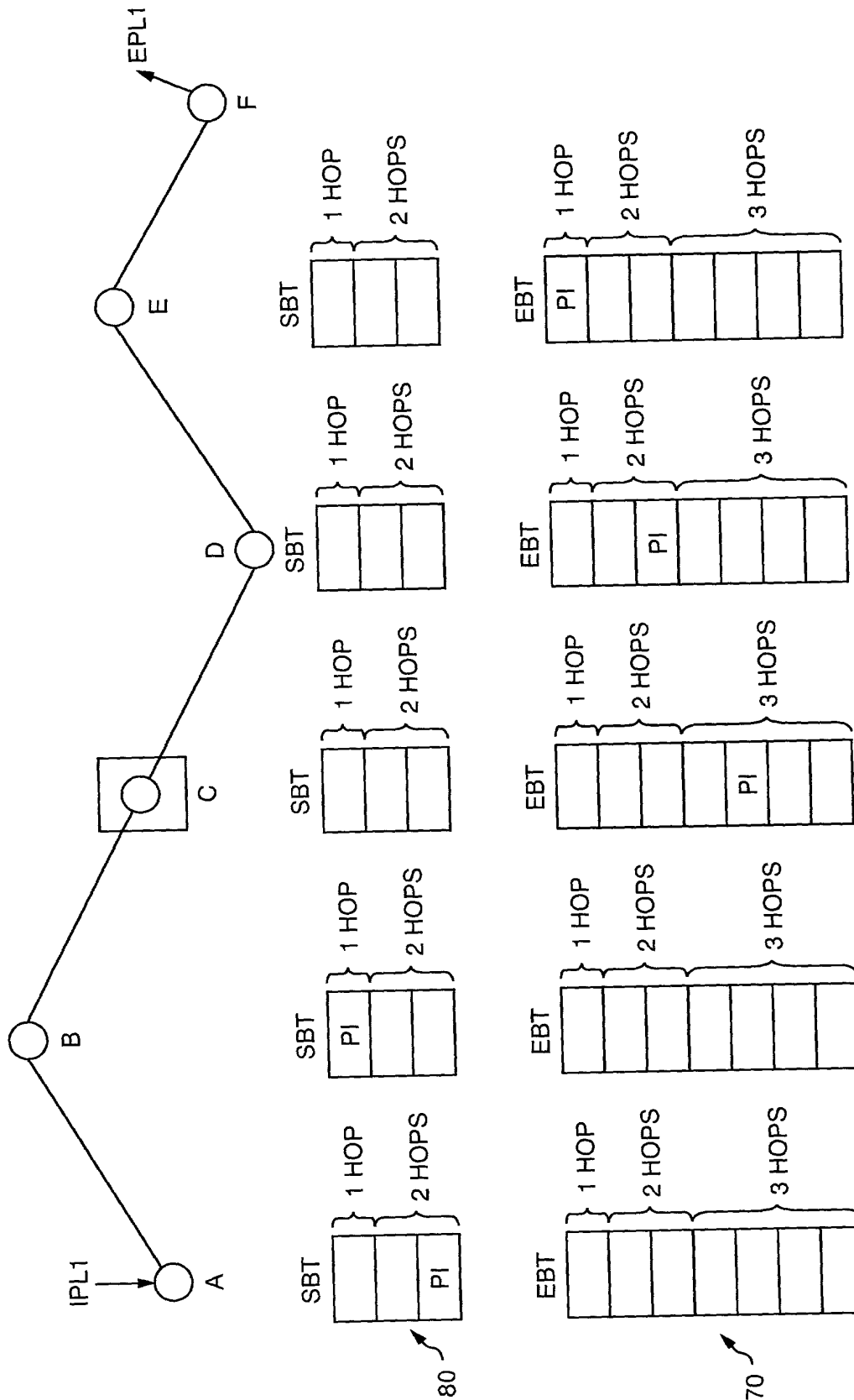


FIG. 11F

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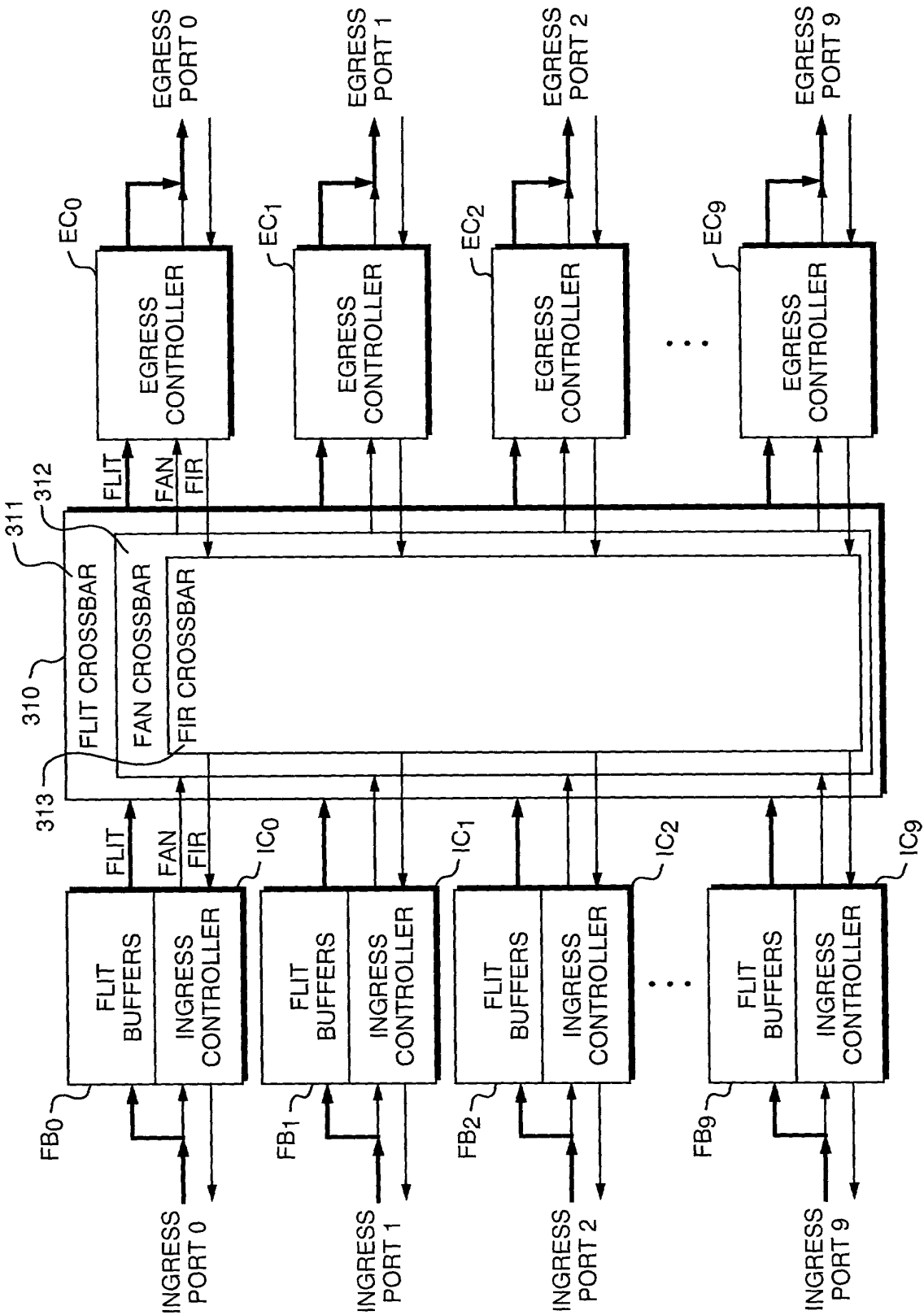


FIG. 12

CONTROL STRUCTURE	SIZE (IN BITS)	DESCRIPTION
IngressPacketState	1280x35=44,800	EACH IngressPacketState STRUCTURE MANAGES THE STORAGE OF A PARTIALLY RECEIVED PACKET ON ONE OF THE INGRESS PORTS.
EgressLaneState	(128x30=3,480)	EACH EgressLaneState STRUCTURE SUPPLIES INFORMATION USED TO PROCESS RECEIVED CREDITS.
AvailableEgressLane	(128x1)	EACH FLAG INDICATES THAT A PARTICULAR LANE IS AVAILABLE OR IN USE.
FanState	(512x44=22,528)	EACH FanState STRUCTURE HOLDS ONE FAN WAITING TO BE CONVERTED INTO A FIR AND POINTERS WHICH ALLOW CREATING A LINKED LIST OF PACKETS WAITING ON A PARTICULAR CHANNEL AND A LINKED LIST OF FANS COMPRISING A PARTICULAR PACKET.
AvailableFanState	(512x1)	EACH FLAG INDICATES THAT A PARTICULAR LOCAL FANSTATE STRUCTURE IS AVAILABLE OR IN USE.
WaitingForLanes	(2928x1)	EACH FLAG INDICATES THAT A PARTICULAR TUNNEL SEGMENT HAS A PACKET READY TO BE ASSIGNED TO A LANE AS SOON AS ONE BECOMES AVAILABLE.
WaitingForFSM	(2928x1)	EACH FLAG INDICATES THAT A PARTICULAR CHANNEL HAS A FAN READY TO BE CONVERTED INTO A FIR AS SOON AS THE EgressController HAS BANDWIDTH AVAILABLE TO PERFORM THE CONVERSION.
WaitingForFirFifo	(2304x1)	EACH FLAG INDICATES THAT A PARTICULAR LANE HAS A FAN READY TO CONVERT INTO A FIR AS SOON AS ROOM IN THE FIR FIFO BECOMES NON-FULL.
SegmentPointer	(2938x13=38,194)	EACH SegmentPointer POINTS TO A QUEUE OF PACKETS WAITING ON A TUNNEL SEGMENT.

FIG. 13

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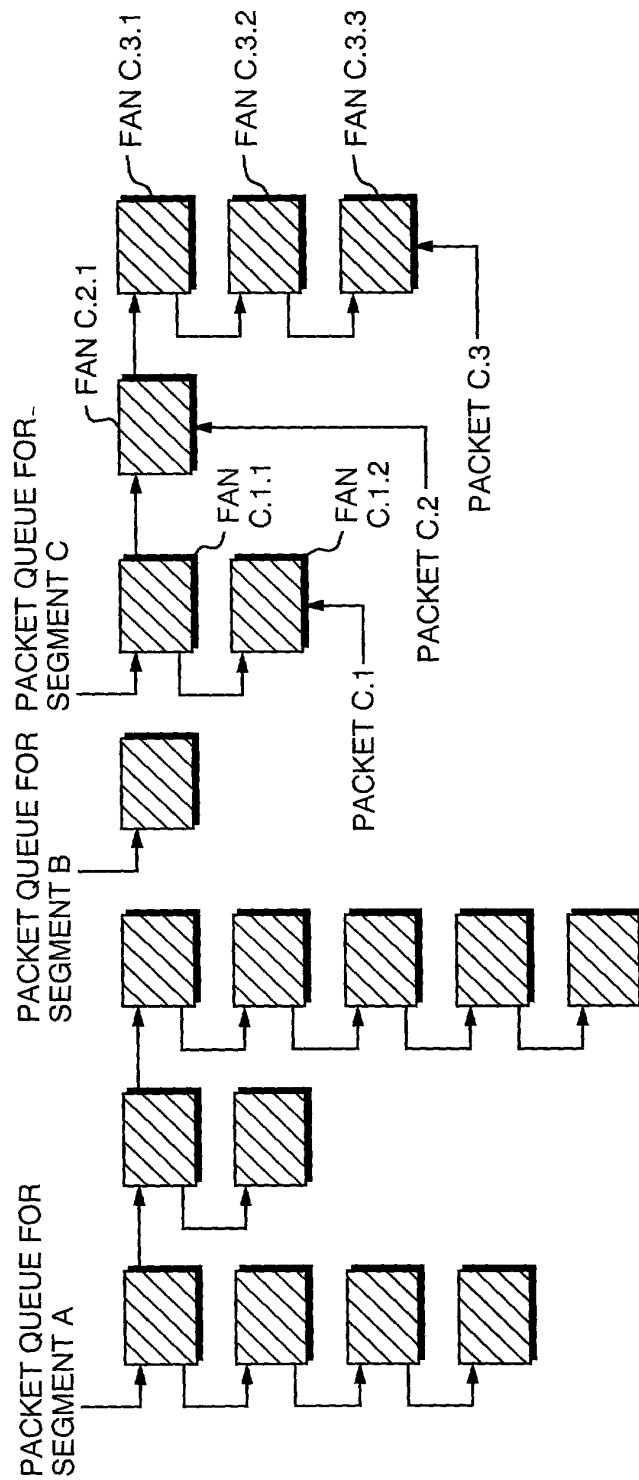


FIG. 14

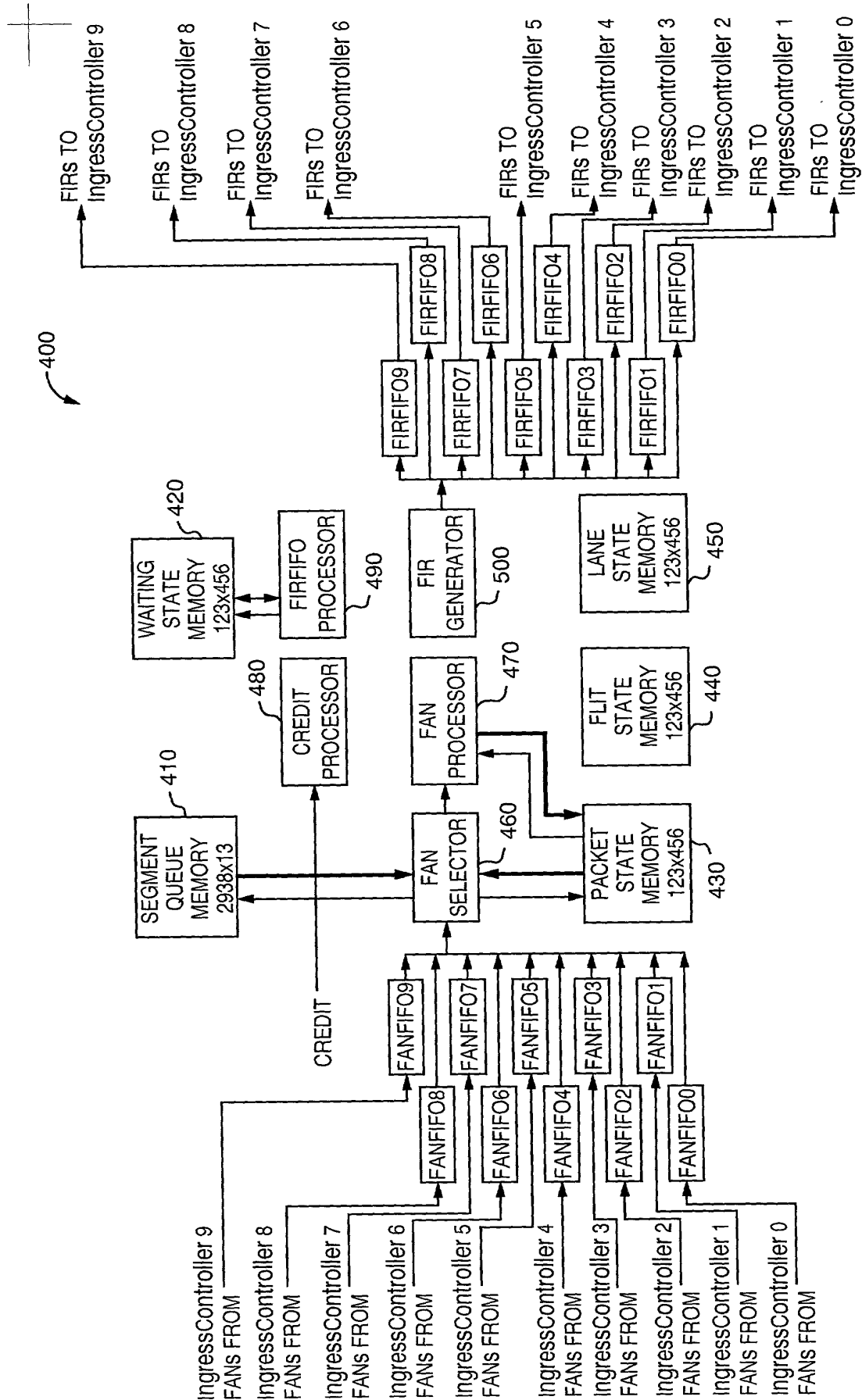


FIG. 15